



Photo by Mark Gocke at markgocke.com

Summary Forum Workshop #1 November 28-December 1, 2005 Salt Lake City, Utah

Administrative

Participants:

Clait Braun, Jim Burruss, Tom Clayson, Leta Collord, John Dahlke, Bob Davison, Ben Deeble, Connie Eissinger, Dale Eslinger, Shawn Espinosa, Jeff Foss, Gayle Gordon, Randy Gray, Margaret Soulen Hinson, Alison Lyon Holloran, Brian Kelly, Andy Kerr, Kate Kitchell, Paul Makela, Bruce McCloskey, Cal McCluskey, Ron McNeil, Dave McNinch, Terry Messmer, Steve Monsen, Barry Noon, John O'Keeffe, Martin Raphael, David Redhorse, Kerry Reese, Mark Salvo, Lowell Suring, Bob Szaro, Jeff White, Elaine York

Forum Support: Tony Apa, Dwight Bunnell, Celia Bunnell, Pat Deibert, Mark Hilliard, San Stiver

Facilitation Team: Marsha Bracke (Wednesday only), Larry Fisher, Susan Hayman

Future Workshop Dates and Locations:

- Boise, Idaho: 1pm on Monday, January 30 to 12pm on Wednesday, February 1.
- Phoenix, Arizona: 1pm on Monday, February 27 to 12pm on Wednesday, March 1.

Group Discussion Key Points

(Transcribed flip chart notes and presentations are available under "Workshop #1" on the Forum website, <http://sagegrouse.ecr.gov>)

Tuesday, November 29

Introductions

Susan Hayman opened the workshop, and asked those in the room to introduce themselves by providing their name, background information, and their individual definition of Forum success. Comments related to "Forum Success" were noted by the Facilitation Team and are posted separately under "Workshop #1" on the Forum website.

Tuesday Evening Panel

Following introductions, Larry Fisher moderated a panel comprised of National Sage-Grouse Framework Team Members Dwight Bunnell, Pat Deibert, Mark Hilliard and San Stiver. San and Dwight provided introductory remarks on the existing situation, Conservation efforts currently underway, Range-wide strategy application and use, and the purpose of using a collaborative approach (see San Stiver's introductory notes under Workshop #1 on the Forum website).

During the discussion, Gayle Gordon was asked to provide a brief report on the recent Western Governors' Association Sagebrush Conservation Council meeting (SCC) held the previous week. Gayle said that the purposes of the SCC are to provide support, range-wide coordination and technical assistance to local working groups (LWGs), and to help develop a greater understanding of sagebrush habitat. Participants in the SCC are appointed by their respective governors and Department Secretaries. She said that it is clear that the intent of the SCC is to add value to the discussion of sagebrush and sage-grouse conservation – they do not wish to duplicate efforts underway by the Western Association of Fish and Wildlife Agencies (including the Forum), and local working groups. However, the SCC can provide political assistance to get issues on the political radar screen.

One participant felt that the best use of the SCC would be to secure funding to support on-the-ground projects. Another emphasized the need to communicate clearly what the WGA and WAFWA roles are so that the local working groups aren't confused about this.

Wednesday, November 30

Operational Protocols

This discussion is captured in track changes to the draft document, which have been incorporated into the latest version of the Protocols – dated 11/30/05.

Comprehensive strategy process, product relationships, and timeline

San Stiver described the components of the comprehensive strategy (see Powerpoint presentation). The following are the key points from this presentation/discussion:

- 1) Seek strong integration with other components and groups, e.g., research, funding, monitoring; cross-pollination and coordination are critical elements of success. The process will have to identify an appropriate mechanism to encourage this sharing and integration.
- 2) The LWGs are the foundation of the Greater Sage-grouse conservation strategy, because they are closest to the ground and are doing much of the implementation, and a good deal of meaningful research and monitoring; nevertheless, their success is uneven – many are unfocused and have little direction. Some form of peer review of local work group plans would be advisable, as would be a means for evaluating how their projects get funded.
- 3) We need to be clear about the distinctions of the term “range-wide” and what we mean by “conservation.” Also, how we handle variability, e.g., in mitigation or enhancement measures? [See notes below in the section on *Potential Range-Wide Issues*].
- 4) Questions were raised about whether the Forum's work will have any binding authority, and how the results will be integrated into existing agency plans (e.g., WAFWA, FWS) or adopted/adapted by local working groups. The agencies will look at their capacity to implement the strategies, and look at their model of implementing

conservation work. Given the commitment to an interagency and adaptive management approach, Forum recommendations should be seen as general guidance for the 10-year plan. In terms of local working groups, we should pursue a process where local working groups use this information to move forward. But the Forum's guidelines are just parameters/guidelines based on existing uses; they'll differ in application depending on contextual elements.

The general intent of this process is to ask, "Where are we at?" and "Where are we going?" The Forum's report is going to be a road map to determine where we're going and how we're going to get there.

Potential Range-Wide Issues

Mark Hilliard presented the results of participant rankings (and comments) regarding the importance of issues to address in the strategy, and discussed the links with existing documents that describe critical issues (see his PowerPoint presentation under "Workshop #1" on the Forum website). Mark then went on to outline considerations for defining characteristics of the terms "range-wide" and "conservation":

Criteria/consideration for the definition of a range-wide issue:

- Scale: range-wide, ecosystem, population or sub-population
- Characteristics: Factors or situations that may adversely affect ability to implement effective conservation actions or achieve conservation success at one or more scales

Criteria/consideration for the definition of a conservation issue:

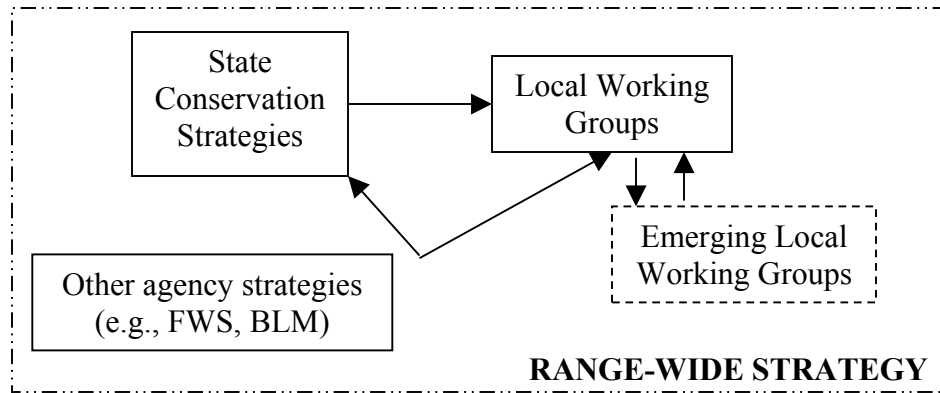
- Non-fiscal in nature (and within reasonable capability)
- Directly/indirectly related to ability to complete in a timely fashion
- Directly/indirectly affect conservation outcome
- Not more appropriately addressed by another strategy component

Participant Comments:

- These attributes may be too restrictive, e.g., could an issue not be constrained by "timeliness"?
- The criteria are not meant to be a screen/filter, but as a reference tool; they are simply attributes that we would be looking for in evaluating which issues are priorities for the Forum
- We need to distinguish between conservation actions and the other components of the sub-strategy; and we shouldn't be afraid, as we identify these range-wide conservation issues, to make links with other components (e.g., monitoring)
- The first cut would be whether it is a conservation issue; then we'd determine if it was range-wide or not
- Again, the conservation issues should be explicitly linked to other components of the comprehensive strategy, and to create a mechanism for sharing and connecting the conservation sub-strategy to the other components and groups
- We will certainly need to focus on addressing the top three or four issues; once we resolve those, we can deal with the issues that may be less of a priority

Issue grouping and prioritization

It's important to get a sense of how the different pieces and programs relate to one another. Several people contributed to the flip chart diagram below to help define how the different levels of organization relate to one another. With this in mind, we'll need to figure out how to facilitate sharing and exchange and integration among these different parts of the effort:



Listing of identified threats/potential issues

Mark kicked off a discussion of potential issues based on information contained in the Forum prework (Discussion Paper and Sampler Matrix) and from Forum Participant Questionnaire #1. Rather than revisit these previously identified issues, the group decided to brainstorm additional issues and/or identify issues that the Forum should not address. The following lists were products of this brainstorming exercise:

Brainstormed list of issues (additions to/deletions from the issues identified in the Conservation Assessment and 12-Month Finding):

Issues to add:

Water development
 Impairments of natural drainage
 Dispersed recreation (esp. motorized)
 General industry infrastructure
 Tall structures
 West Nile virus
 Regulatory mechanisms
 Potential inadequacy of local plans
 What are good conditions/habitat?
 How do you define guidelines for good habitat?
 Data gaps
 Habitat conversion
 Local engagement and commitment – how to capture (zoning, institutions)?

Issues to Delete (tabled for now):

Over-utilization (“take”)
 Predation
 Weather/Climate Change

Issues to add (continued):

Long term commitment of leadership
Coordinated restoration strategy at landscape scale
Integration of issues at landscape scale
Cumulative effects of factors
Lack of analytical tools to understand trade-offs
Lack of a standardized vegetation base-map
Continuity and sustainability

Issue categories (as defined by the Facilitation Team)

Following the brainstorming, participants had the opportunity to ask clarifying questions about the listed issues. While the group took a brief break, the Facilitation Team identified the following five categories to use for grouping the existing issues from the Conservation Assessment, 2-Month Finding, and those listed during the brainstorming and clarification exercise:

- Regulatory mechanisms and barriers
- Integration and coordination across range and jurisdictions
- Habitat conservation and land use
- Science, data management, and information
- Habitat restoration

There was general support for the above clustering of issues, and participants then self-separated into the following working groups to discuss the collection of issues assigned to each work group:

- **Habitat restoration**
Kate Kitchell (contact person), Jeff White, Dale Eslinger, John Dahlke, Shawn Espinosa, Steve Monsen (Steve joined this group on Thursday)
- **Regulatory mechanisms and barriers**
Clait Braun (contact person), Dave McNinch, John O'Keefe, Tom Clayson, Connie Eissinger, Jeff Foss
- **Integration and coordination across range and jurisdictions**
Cal McClusky (contact person), Gayle Gordon, David Redhorse, Bob Davison, Leta Collard, Terry Messmer, Brian Kelly
- **Habitat conservation and land use**
Mark Salvo (contact person), Margaret Soulen Hinson, Jim Burruss, Randy Gray; Lowell Suring, Ben Deeble, Ron McNeil, John O'Keefe (John joined this group on Thursday)
- **Science, data management, and information**
Elaine York (contact person), Bob Szaro, Martin Raphael, Paul Makela, Andy Kerr, Kerry Reese, Barry Noon

Work Group Products

Thursday, December 1

The work groups spent much of Wednesday afternoon and early Thursday morning in discussions. Each group was asked to develop a problem statement, to define the desired condition, to identify challenges to developing a strategy, and to assign a high, moderate or low degree of importance for addressing each issue/subissue within their issue category. The following are brief reports from each of the work groups:

Work Group #1 Issue: Range-Wide Habitat Restoration

Sub-Issue #1: Range-wide Restoration (high importance)

- **Problem Statement:** Loss of 44% of historic sage-grouse range and fragmentation/habitat degradation of existing range (use consistent assessment methods to determine what portion of range is unavailable – e.g., towns, infrastructure, etc.).
- **Desired Condition** (not a habitat condition):
 - Seek to establish target acres or percentage of range that is practical
 - Stabilize loss of habitat/do not allow sites to continue to deteriorate. Prevent further invasive weed invasion (cross-pollination w/ conservation measures)
 - Ensure that restoration techniques are ecologically sound
 - Management practices/policies maintain/recover sagebrush steppe habitat
 - Be more coordinated and targeted (enforcement and restoration) with respect to restoration efforts
 - Optimize post-fire restoration efforts so that goals/objectives include restoring sagebrush/sage-grouse habitat needs
- **Challenges to Developing a Strategy:**
 - Being “able” to restore a desired habitat. Knowing what to do (e.g., genetic make-up, species composition, structure, understanding variability)
 - Lack of baseline data
 - Management policies not effective or consistent across jurisdictional boundaries
 - Lack of effective methods for invasive species control (no rangeland labels for some herbicides, i.e., Plateau, Oust)
 - Native seed availability
 - Planting expertise

Sub-Issue 2: Native Seed Availability (high importance)

- **Problem Statement:** Number of different species needed and variability within species for site-specific needs (knowledge); technology and capacity to produce/store/plant items in quantity and timely.
- **Desired Condition:** Develop a regional assemblage of species that are site adapted.

Sub-Issue 3: Planting Expertise (moderate importance)

- **Problem Statement:** While there is considerable expertise, it is limited: a) inter-seeding or enhancement methods, b) not enough people or technology transfer to meet the range-wide scale (needs broader distribution).
- **Desired Condition:** Training, pool of regional experts and references, current knowledge readily available.

Work Group #2 Issue: Regulatory mechanisms and barriers

Issue: There is inconsistent and inadequate application of existing regulations. Some regulations may be outdated. Coordination among jurisdictions and agencies should be improved and enhanced (high importance).

- **Problem Statement:** Greater Sage-Grouse may be negatively impacted from lack of uniform application of regulations and poor coordination among existing jurisdictions and agencies.
- **Desired Condition:** Sage-grouse populations will be maintained and enhanced by consistent application of regulations taking into account site-specific circumstances among agencies and jurisdictions.
- **Challenges to Developing a Strategy:**
 - Identification of regulations
 - Funding
 - Agency/jurisdiction buy-in
 - Institutional inertia
 - Agency staffing
 - Lack of political will
- How to measure success:
 - Sage grouse counts (leks, males, nest success, % young)
 - Change in distribution
 - Agreements among agencies, jurisdictions, meetings, studies
- Resources required:
 - Improved funding
 - Adequate staffing
 - Information administrators
 - Informed citizenry
- Proposed approach
 - Identify regulations by agency
 - Evaluation of regulation criteria
 - Seek uniform application
 - Seek regulation changes if needed

Note: After report-out mid-morning on Thursday, Forum Participants agreed that additional issues related to the presence and adequacy of existing regulatory mechanisms, as well as inconsistencies and/or inadequacies in the implementation of these mechanisms should be developed by this work group.

Work Group #3 Issue: Integration and coordination across range and jurisdictions

Sub-Issue 1: Lack of coordinated planning-implementation (high importance)

- **Problem Statement:** Current approaches do not facilitate coordinated planning and implementation across political boundaries.
- **Desired Condition:** Long-term shared leadership and community commitment resulting in implementation and evaluation of plans that integrate the issues and address cumulative effects.
- **Challenges to Developing a Strategy:**
 - Local ownership in existing plans
 - BLM ownership in Strategy
 - Bureaucratic inertia
 - Political boundaries
 - Communication
 - Conflicting policies within agencies
 - Competing priorities
- **Proposed Approach**
 - PECE integration

Wildlife Action Plans/Integration with State comprehensive WCS

Sub-Issue 2: Insufficient opportunities to share information among LWGs (high importance)

- **Problem Statement:** Opportunities have not been created because “information sharing” has not been made a priority.
- **Desired Condition:** LWGs have ongoing regular/annual opportunities to collectively share information on a state/regional basis.
- **Challenges to Developing a Strategy:**
 - Leadership commitment
 - Resources – Mechanism
 - Lack of an adequate status and needs assessment
- **Approach:** Information sharing between Regional, Range-wide, Agency, LWG including,
 - Research
 - Process
 - Success
 - Failure

Sub-Issue 3: Inconsistency in policy and coordination across jurisdictional boundaries (high importance)

- **Problem Statement:** Lack of coordination of agency policies, programs and regulations at national, regional, state and local levels to address issues has adversely affected sage-grouse conservation at multiple levels.
- **Desired Condition:** Coordinated policies that enhance sage-grouse conservation efforts at multiple levels.
- **Challenges to Developing a Strategy** No comprehensive analysis has been done
 - Not a priority
 - Bureaucratic inertia
 - Competing priorities
 - Conflicting policies within agencies
- **Approach:**
 - Ombudsperson
 - Comprehensive analysis
 - PECE integration

Sub-Issue 4: Coordinated restoration on broader scale (moderate importance)

- **Challenges to Developing a Strategy** Long-term leadership commitment
 - Continuity-sustainability
 - Integration of issues
 - Cumulative effects

Sub-Issue 5: Networking/Communication (moderate importance)

- **Challenges to Developing a Strategy:**
 - Local engagement and commitment
 - Other programs (SCWS, etc.)
 - PECE
 - Policy consistency and coordination

Work Group #4 Issue: Habitat conservation and land use

List of sub-issues within this group. Work group participants initially defined the sub-issues as high or moderate importance. *In the large group discussion that included the other Forum participants, some of these initial ratings were changed to those reflected below.* Those sub-issues assigned a high degree of importance by the larger group are boxed. The rest were assigned “moderate” importance. Many participants felt “Tall Structures” should be included as a potential “high.”

- Tall Structures (powerlines, wind turbines, communication towers, etc.)
- Fences
- Grazing
- Roads and Railroads
- Water Development (surface water, impoundments, damage to water systems, etc.)
- Dispersed Recreation (OHV)
- Mining

- Energy Development (including roads, transmission lines, compressors and collection stations, and other associated development, plus threats associated with West Nile Virus)
- Fire
- Invasive Species
- Conifer Encroachment
- Urbanization
- Agriculture

The group did not have time to work through each of the high importance sub-issues. The ones they worked on are noted below.

Sub-Issue 1: Livestock Grazing (high importance)

- **Problem Statement:** Landscapes managed for maximum livestock grazing often fail to provide optimum habitat for sage-grouse.
- **Desired Condition:** Private and public rangelands are managed to ensure healthy rangelands that support multiple land uses and ensure appropriate canopy and understory for sustaining sage-grouse populations.
- **Challenges to Developing a Strategy:**
 - Technical assistance for developing prescribed grazing plans
 - Economic incentives to ensure proper management of shrub-lands to benefit sage-grouse
- **Related Issues:** Fire cycles, fences, undesirable plant invasion, and hydrologic change. These are being addressed in other issues.

Sub-Issue 2: Fire – wildfire, prescribed fire, fire suppression, fire exclusion (high importance)

- **Problem Statement:** Too large, too hot, too frequent fire in some sagebrush habitats, not enough fire in other places.
- **Desired Condition:** Use of fire and other tools to balance and maintain sagebrush steppe ecosystems.
- **Challenges to Developing a Strategy:**
 - Contrary land uses
 - Lack of understanding of fire regime
 - Site-specific, depending on vegetation, elevation, etc.
 - Public acceptance of use of fire

Sub-Issue 3: Energy Development (high importance)

- **Problem Statement:** Oil, gas coal and CBM development will occur
- **Desired Condition:** Management priorities limit impacts and habitats are enhanced offsite to secure grouse populations.
- **Challenges to Developing a Strategy:**
 - No national energy strategy
 - Increased demand is driving rapid un-phased development

- Lack of government will and funding to manage energy development to protect other resources
- Lack of collaborative efforts between energy interests, surface owners and conservationists
- CBM and West Nile Virus links

Sub-Issue 4: Invasive Species (high importance)

- **Problem Statement:** One of the most notable threats to the sagebrush ecosystem and Greater Sage-grouse is invasive plants (e.g., cheatgrass, spotted knapweed, yellow star thistle, medusa head rye). Effects of invasive species on ecosystem function (e.g., altered fire regimes, nutrient loss, altered local microclimate, changes in community structure, prevention of succession) are significant at both local and regional scales, and are becoming increasingly more important on a global scale. Invasion by exotic species, particularly cheatgrass, is consistently cited as one of the major challenges to maintenance of healthy sagebrush communities.
- **Desired Condition:** Invasion of weeds into sagebrush cover types is minimized; native plants are likely to dominate the understory of sagebrush stands.
- **Challenges to Developing a Strategy:** Understories of many sagebrush shrub lands are increasingly likely to be dominated by cheatgrass and other invasive weeds. Any fires occurring in these stands would facilitate further conversion to cheatgrass. Fire suppression, when feasible, is desirable but would be a stopgap, short-term mitigation. In the long term, the use of chemical or other treatments to reduce biomass of cheatgrass and other invasive weeds in understories of these stands is needed, combined with reseeding of native grasses and forbs or desirable non-native plants. There is often public resistance to the use of herbicides. Reseeding of native grasses and forbs is expensive and difficult to implement and there is a general unavailability of suitable seed sources.

Sub-Issue 5: Tall Structures – powerlines, wind turbines and communication towers (moderate-high importance)

- **Problem Statement:** Presence of “tall structures” in key sage-grouse habitat may lead to increased avian predation or avoidance behavior. Operational and maintenance activities during critical time periods may create disturbances.
- **Desired Condition:** Siting of new “tall structures” in areas that minimize potential impacts to sage-grouse and sage-brush species. Evaluate affect of existing “tall structures” on avian predation and avoidance behavior.
- **Challenges to Developing a Strategy:**
 - Increasing demand for energy and communication resources will result in more “tall structures” in sage-grouse habitat
 - Limited scientific data on effect of “tall structures” to avian predations or avoidance behavior
 - Variability in siting distance criteria from leks (0-5 miles) and lack of data to support criteria

- Perch discouragers on tall structures to limit raptor or corvid perching are ineffective, and underground power lines options are expensive and cause other impacts

Sub-Issue 6: Impairment of Surface Water Drainage (moderate importance)

- **Problem Statement:** The development of large dugouts, dams and reservoirs affects the amount and intensity of runoff waters that play a role in replenishing sagebrush plant communities. Therefore, health vigor and community structure may be compromised and produce undesirable changes in the watershed. These habitats may become less viable for Greater Sage-grouse.
- **Desired Condition:** Surface water developments do not alter the water regime to the detriment of sage-grouse habitats.
- **Challenges to Developing a Strategy:**
 - Need reliable and environmentally friendly alternative water sources. This could include wells or pipeline systems. The water sources must be dependable and cost-effective to overcome concerns of grazing managers
- **Related issues:** Roads and railroads

Sub-Issue 7: Urbanization (moderate importance)

- **Problem Statement:** Conversion of sagebrush plant communities to urbanization constitutes habitat loss; related developments, such as county residential (ranchettes) and its infrastructure cause some habitat loss but mainly contribute to fragmentation.
- **Desired Condition:** Prime sagebrush lands are conserved with tools such as conservation easements, set-asides or transfer of development rights.
- **Challenges to Developing a Strategy:**
 - Pressures of urbanization
 - Exorbitant cost of land near urban centres
 - Other related affects such as recreation demands
 - Limited economic conditions – alternative to urbanization

Sub-Issue #8: Conifer Encroachment (moderate importance)

- **Problem Statement:** The increase in the distribution and density of conifer forests and woodlands (e.g., ponderosa pine, Douglas fir, pinyon pine, juniper) has been identified as a significant threat to the sagebrush ecosystem. These forests and woodlands have expanded greatly when compared to their distribution >150 yrs ago as a result of ecological changes associated with a decrease in fire frequencies, increased fire suppression, changes in the climatic regime, historical patterns of livestock grazing, and increase in atmospheric CO₂. Modeling the effects of climate change in the Great Basin has resulted in scenarios that show continued expansion of pinyon-juniper woodlands due to increased precipitation.
- **Desired Condition:** Encroachment of conifer forests and woodlands into existing sagebrush cover types is minimized; conifers are not likely to be present in the overstory of sagebrush stands.
- **Challenges to Developing a Strategy:** Reducing the threat posed by conifers to sagebrush is complicated by decreasing fire frequencies, increasing fire

suppression, and changes in the climatic regime. Management of conifer encroachment is likely to be effective with an aggressive program of prescribed burning. However, use of fire may increase the threat of invasion by cheatgrass and there is often limited public acceptance of prescribed fire. Mechanical control of conifers may be needed to mitigate the threat of sagebrush loss but it is expensive to implement and there is limited public acceptance of some techniques (e.g., chaining). Control of these woody species through harvesting for biofuel for generation of electricity may be effective but the process is currently not economically viable.

Work Group #5 Issue: Science, data management, and information

List of sub-issues within this group. Work group participants made an initial listing of sub-issues, and assigned them a degree of importance. They then grouped those with high importance and developed problem statements for each of these grouped sub-issues:

- | |
|--|
| <ul style="list-style-type: none"> • Lack of techniques for standardized monitoring for purposes of population monitoring (H) • Lack of effectiveness monitoring following habitat treatments (H) • Lack of standardized monitoring techniques to monitor habitat changes following treatment (H) |
| <ul style="list-style-type: none"> • Lack of standard veg base map (H) |
| <ul style="list-style-type: none"> • Data clearinghouse and repository (rules of access) (H) • Range-wide collaboration – coordination of funding, research, monitoring, habitat conservation and restoration (H) |
| <ul style="list-style-type: none"> • Tools and training with a goal of better implementation on the ground (M) |
| <ul style="list-style-type: none"> • Lack of analysis tools (H) |
| <ul style="list-style-type: none"> • Describe DFCs on landscape/mid-scale; criteria for listing and success (H) |
| <ul style="list-style-type: none"> • Potential impacts to other species (?) (L) |

Sub-Issue 1: Standardized veg base map (high importance)

- **Problem Statement:** Lack of standardized veg base map precludes characterization and current condition for detecting change.
- **Desired Condition:** Range-wide map
- **Challenges to Developing a Strategy:**
 - Range-wide attributes relevant to sage-grouse conservation
 - Identification of lead to create map
 - Funding
 - Difficulty establishing buy-in from many involved
 - Remote imagery lacks detail needed at the local level

Sub-Issue 2: Definition of success for sage-grouse (# of leks, nesting success, enhanced distribution, sustained increase in bird #s by “x” percent) -- (high importance)

- **Problem Statement:** Lack of definition for success or failure.

- **Desired Conditions:** Range-wide standards for sustainable sage-grouse populations with sustainable harvest.
- **Challenges to Developing a Strategy:**
 - Lack of data for all populations to develop standards
 - Political agreement

Sub-Issue 3: Ability to predict population outcomes/habitat as a result of vegetation change (high importance)

- **Problem Statement:** Lack of analysis tools to model effects of habitat treatments (succession, disturbance, bird response).
- **Desired Condition:** Managers have a tool kit to model habitat and understand and predict sage-grouse response to vegetation change.
- **Challenges to Developing a Strategy**
 - Range-wide habitat variation
 - Identification of drivers for models
 - Lack of standardized database
 - User friendly for managers

Sub-Issue 4: Range-wide collaboration (high importance)

- **Problem Statement:** Lack of coordination for funding, research, monitoring and management.
- **Desired Condition:** Institutional framework to create (above) collaborative effort.
- **Challenges to Developing a Strategy:**
 - Turf
 - Funding

Next Steps/Wrap-Up

Follow up action items:

- 1) Post survey results to the web site (Susan to send to Larry/Kim)
- 2) Schedule for workshops:
 - Workshop #2: January 30 – February 1, Boise, ID
 - Workshop #3: February 27 – March 1, Phoenix, AZ
- 3) Assignment for Workshop #2:
 - Work groups develop initial draft strategy (using provided template for content guidelines) for each “high degree of importance” issue/subissue identified by the large group on Thursday.
 - Some Forum participants asked permission of the group to participate in more than one work group. They will coordinate with the respective contact person for each group.
- 4) Send out follow up message, including explanation of terms for Strategy Template (e.g., goals, objectives – Susan/Larry)

- 5) Develop a draft collaborative roadmap and timeline for review and comment by Forum participants (Susan/Larry)
- 6) Synthesize notes from Workshop #1, share with participants for review and comment, then post to web (Susan/Larry)

Evaluation comments:

An online evaluation will be provided to Forum participants for their use following this workshop. Susan asked for any verbal evaluation from participants. The following thoughts were offered:

- 1) We need to make sure we do something positive/tangible for Sage-Grouse – too many plans and meetings have been held with limited impact. Some hard decisions need to be made in order to conserve grouse.
- 2) Exercise to define operational protocols could have been done in way that is much more streamlined (half the time); could have been handled prior to the meeting.
- 3) We need to get the science right – this process could just be a cover or a diversion from the scientific analysis.